

AMENDMENTS TO THE CLAIMS

1. (currently amended) A filter column comprising:

a body having a passageway extending therethrough, said body comprising at least a first body portion, a second body portion, and a third body portion, where an outer diameter of said first body portion is greater than an outer diameter of said second body portion, and where said outer diameter of said second body portion is greater than an outer diameter of said third body portion;

a filter located within said passageway, said filter adapted to isolate nucleic acids from a liquid sample;

a first bearing surface adapted to rest against the rim of a first collection tube, where an outer diameter of the body portion directly below the first bearing surface is adapted to fit securely with the first collection tube; and

a second bearing surface adapted to rest against the rim of a second collection tube, where an outer diameter of the body portion directly below the second bearing surface is adapted to fit securely with the second collection tube, and where the opening of the first collection tube is greater than the opening of the second collection tube;

wherein said body is adapted to seat a laser microdissection extraction device at the first body portion.

2. (previously presented) The filter column of claim 1, wherein an inner diameter of said passageway in said first body portion is greater than an inner diameter of said passageway in said second body portion.

3. (previously presented) The filter column of claim 1, wherein an inner diameter of said passageway in said second body portion is greater than an inner diameter of said passageway in said third body portion.

4. (previously presented) The filter column of claim 1, wherein said filter is located within a portion of said passageway in said second body portion.

5. (previously presented) The filter column of claim 1, wherein said filter is located within a portion of said passageway in said third body portion.

6. (previously presented) The filter column of claim 1, further comprising a lid having a portion adapted to be removably seated within a first end of said body.

7. (previously presented) The filter column of claim 6, wherein said first body portion has an annular lip adapted to removably secure said lid portion in a closed position in said first end of said body.

8. (currently amended) A filter column for use with collection tubes of different sizes to isolate nucleic acids from a liquid sample, said filter column comprising:

a body having a passageway extending therethrough, said body comprising at least a first body portion, a second body portion, and a third body portion, where an outer diameter of said first body portion is greater than an outer diameter of said second body portion, and where said outer diameter of said second body portion is greater than an outer diameter of said third body portion;

a filter located within said passageway, said filter adapted to isolate nucleic acids from said liquid sample; and

a plurality of bearing surfaces on an outer surface of said body, at least two of said bearing surfaces being adapted to seat on at least two of the collection tubes, each of the collection tubes having differently-sized openings, said plurality of bearing surfaces including at least a first bearing surface located between said first and second body portions, and a second bearing surface located between said second and third body portions;

a lid having a portion adapted to be removably seated within a first end of said body; and at least one vent disposed on an interior wall of said body and adjacent to said first end of said body, wherein said vent is in fluid communication with an exterior of said filter column as said lid is adapted to be removably seated within said first end of said body;

wherein said first end of said body is adapted to seat a laser microdissection extraction device.

9. (previously presented) The filter column of claim 8, comprising four vents.
10. (previously presented) The filter column of claim 6, wherein said lid includes a hinge being integral to said body.
11. (previously presented) The filter column of claim 10, wherein said hinge is offset to said first end of said body.
12. (previously presented) The filter column of claim 1, further comprising deformable ribs protruding from an outside surface of said body.
13. (previously presented) The filter column of claim 1, further comprising a plurality of protrusions on said body and extending radially away from said body.
14. (previously presented) The filter column of claim 1, wherein said outer diameter of said second body portion is selected such that said body is removably locatable within a 1.5-2.0 ml centrifuge tube.
15. (previously presented) The filter column of claim 1, wherein each of said bearing surfaces is adapted to seat on respective collection tubes of different sizes.

16. (previously presented) The filter column of claim 1, wherein said outer diameter of said second body portion is between 0.32 and 0.37 in.

17. (previously presented) The filter column of claim 1, wherein said outer diameter of said third body portion is selected such that said body is removably locatable within a 0.5 mL centrifuge tube.

18. (previously presented) The filter column of claim 1, wherein said outer diameter of said third body portion is between 0.25 and 0.27 in.

19. (previously presented) The filter column of claim 1, further comprising a fourth body portion and a third bearing surface wherein an outer diameter of said fourth body portion is less than an outer diameter of said third body portion.

20. (previously presented) The filter column of claim 1, having a microliter capacity of greater than 200 microliters, having a filter area of greater than 1,000 mm² and having a height from a top of said body to a top of said second bearing surface being less than 0.5 in.

21. (previously presented) A filter column for use with collection tubes of different sizes to isolate nucleic acids from a liquid sample, said filter column comprising:

a body having a passageway extending therethrough, said body comprising at least a first body portion, a second body portion, and a third body portion, where an outer diameter of said first body portion is greater than an outer diameter of said second body portion, and where said outer diameter of said second body portion is greater than an outer diameter of said third body portion;

a filter located within said passageway, said filter adapted to isolate nucleic acids from said liquid sample; and

a plurality of bearing surfaces on an outer surface of said body, at least two of said bearing surfaces being adapted to seat on at least two of the collection tubes, each of the collection tubes having differently-sized openings, said plurality of bearing surfaces including at least a first bearing surface located between said first and second body portions, and a second bearing surface located between said second and third body portions;

wherein a first end of said body is adapted to seat a laser microdissection extraction device.

22. (previously presented) The filter column of claim 21, wherein said laser microdissection extraction device is adapted to connect to a laser microdissection capture device.

23. (previously presented) A kit for isolating nucleic acids, the kit comprising: a filter column as described in any of claims 1-22; at least one collection tube; a binding buffer, containing a chaotropic agent; a washing solution; and an elution buffer.

24. (canceled)

25. (canceled)

26. (canceled)

27. (previously presented) The filter column of claim 1 wherein the filter column is seated on the first or second collection tube such that the filter column and collection tube combination is suitable for centrifugation.

28. (canceled)

29. (canceled)

30. (canceled)

31. (canceled)

32. (canceled)

33. (canceled)

34. (previously presented) The filtration device of claim 1 wherein the first and second bearing surfaces are located between body portions.

35. (previously presented) The filtration device of claim 1 wherein the first bearing surface is located between the first and second body portions, and the second bearing surface is located between the second and third body portions.